

Abstract of the Invention

A piezo-electric stent and capillary tube is disclosed wherein the polarized piezoelectric material is cylindrical and is disposed between two concentric cylindrical electrodes. The piezo-electric material is polarized either radially or uniformly perpendicularly to the axis of the stent. The stent or capillary tube is provided with leads to each electrode that may then be connected to a stationary or portable energy source. The piezo-electric device of the invention is useful to reduce concretions forming on the stent and to reduce the size of kidney stones or other bodily concretions. The invention produces vibrations which themselves may be beyond the yield strength of the target concretion or have a high cycle frequency which fatigues concretions to the point of failure of the concretion.